

MK1 Boiler - 1,238 MMBtu/hr, Maximum of 48.5 tons/hr coal feed rate and 425,289 tons per consecutive 12 month period
Max Sulfur content = 3.645% by weight, AP42 emission factor for SO₂ = 38 X (% sulfur by weight) = 38 X 3.645 = 138.51 lb/ton
7.8% ash by weight, PM₁₀ emission factor = 0.26 X 7.8 = 2.028 lb/ton
TSP = Max Permit Limit = 0.227 lb/MMBtu X Max Heat Input Rate 1,238 MMBtu/hr = 281.03 lb/hr
NO_x RACT Limit = 13.7 tons/day X 365 days/yr = 5,000.5 tons/yr

Pollutant	Emission Max. Op.		PTE lb/hr	PTE tons/yr
	Factor (lb/ton)	Rate (tons/hr)		
SO ₂	138.51	48.5	6717.74	29423.7
NO _x				5005.5
CO	0.5	48.5	24.25	106.2
PM ₁₀ (F)	2.028	48.5	98.36	430.8
TSP			281.03	1230.9 (Permit Limit Max = 1463 tons/yr)
NM VOC	0.11	48.5	5.34	23.4

Emission factors for SO₂, CO, PM₁₀, & VOC are from USEPA AP-42 5th Edition, Chapter 1.1 - Bituminous and Subbituminous Coal Combustion, Tables 1.1.3 and 1.1.4, with the exception of NO_x, which came from the NO_x RACT limit, and TSP from the TSP emission limit in the Permit.

MK2 Boiler - 3,473 MMBtu/hr, Maximum of 136.2 tons/hr coal feed rate
Max Sulfur content = 3.645% by weight, AP42 emission factor for SO₂ = 38 X (% sulfur by weight) = 38 X 3.645 = 138.51 lb/ton
7.8% ash by weight, PM₁₀ emission factor = 0.26 X 7.8 = 2.028 lb/ton
TSP = Max Permit Limit = 0.27 lb/MMBtu X Max Heat Input Rate 3,473 MMBtu/hr = 937.71 lb/hr
NO_x RACT Limit = 15.4 tons/day X 365 days/yr = 5,621 tons/yr

Pollutant	Emission Max. Op.		PTE lb/hr	PTE tons/yr
	Factor (lb/ton)	Rate (tons/hr)		
SO ₂	138.51	136.2	18865.06	82629.0
NO _x				5621.0
CO	0.5	136.2	68.10	298.3
PM ₁₀ (F)	2.028	136.2	276.21	1209.8
TSP			937.71	4107.2 (Permit Limit Max = 3459 tons/yr)
NM VOC	0.11	136.2	14.98	65.6

Emission factors for SO₂, CO, PM₁₀, & VOC are from USEPA AP-42 5th Edition, Chapter 1.1 - Bituminous and Subbituminous Coal Combustion, Tables 1.1.3 and 1.1.4, with the exception of NO_x, which came from the NO_x RACT limit, and TSP from the TSP emission limit in the Permit.

MKCT1 and MKCT2

319 MMBtu/hr max firing rate, 2,279 gal/hr No. 1 fuel oil max feed rate

Pollutant	Emission Max. Op.		PTE lb/hr	PTE tons/yr	2 Units PTE tons/yr
	Factor lb/MMBtu	Rate MMBtu/hr			
SO ₂	0.4040	319	128.88	564.5	1129.0
NO _x	0.9000	319	287.10	1257.5	2515.0
CO	0.0033	319	1.05	4.6	9.2
PM ₁₀ (F)	0.0043	319	1.37	6.0	12.0
TSP	0.0120	319	3.83	16.8	33.5
NM VOC	0.0004	319	0.13	0.6	1.1

NO_x emission factors from NO_x RACT Order. All other emission factors are from USEPA AP-42 5th Edition, Chapter 3.1 Stationary Gas Turbines, Distillate Oil Fired Turbines, Tables 3.1-1 and 3.1-2a.

MKEG Emissions

3.932 MMBtu/hr from diesel fuel, maximum firing rate of 28.7 gal/hr
500 hours operating restriction

Pollutant	Emission Factor	Max. Op. Rate	PTE	PTE
	lb/MMBtu	MMBtu/hr	lb/hr	tons/yr
SO ₂	0.29	3.93	1.14	0.3
NO _x	4.41	3.93	17.33	4.3
CO	0.95	3.93	3.73	0.9
PM ₁₀ (F)	0.31	3.93	1.22	0.3
TSP	0.31	3.93	1.22	0.3
NM VOC	0.35	3.93	1.38	0.3

Emission factors from USEPA AP-42 5th Edition, Chapter 3.3 - Gasoline and Diesel Industrial Engines
< 600 Hp, Table 3.3.1.

MKEB Emissions

Temporary Permit TP-B-0490 established federally enforceable operational & emissions limitations shown below:

520 gal/hr and 11,760 gal/day maximum No. 2 fuel oil at 0.4% sulfur, by weight

OR 701 gal/hr On-Road Low Sulfur Diesel Fuel (Less than 0.05% sulfur, by weight)

Pollutant	PTE lb/hr	PTE tons/yr
SO ₂	38.96	40.0
NO _x	13.72	25.0
CO	3.43	100.0
PM ₁₀ (F)	2.26	15.0
TSP	5.71	25.0
NM VOC	0.14	25.0

Facility Wide Potential to Emit Criteria Pollutants Emissions Summary (tons/yr)

Pollutant	MK1 tons/yr	MK2 tons/yr	MKCT1 tons/yr	MKCT2 tons/yr	MKEG tons/yr	MKEB tons/yr	Facility Wide Total	Title V Major Source Thresholds	Title V Major Source?
SO ₂	29423.7	82629.0	564.5	564.5	0.3	40.0	113222.0	100 tpy	yes
NO _x	5005.5	5621.0	1257.5	1257.5	4.3	25.0	13170.8	50 tpy	yes
CO	106.2	298.3	4.6	4.6	0.9	100.0	514.6	100 tpy	yes
PM ₁₀ (F)	430.8	1209.8	6.0	6.0	0.3	15.0	1667.9	100 tpy	yes
TSP	1463.0	3459.0	16.8	16.8	0.3	25.0	4980.9	100 tpy	yes
NM VOC	23.4	65.6	0.6	0.6	0.3	25.0	115.5	50 tpy	yes

Notes: MK2 TSP tons/yr is the maximum permit limit instead of 4107.2 tons/yr PTE
MK1 TSP tons/yr is the maximum permit limit instead of 1230.9 tons/yr PTE